

CLAIMS

What is claimed is:

1. A system for loading firmware in a high availability system comprising:
a high speed interconnect;

5 a first cell coupled to the high speed interconnect and comprising errored firmware,
the first cell configured to enable the high speed interconnect; and
a second cell coupled to the high speed interconnect and comprising update firmware,
the second cell configured to load the update firmware to the first cell via the
high speed interconnect to replace the errored firmware.

10 2. The system of claim 1 wherein the second cell further is configured to reset
the second cell and the first cell.

15 3. The system of claim 1 further comprising a third cell comprising second
errored firmware, the third cell configured to enable the high speed interconnect, wherein the
first cell further is configured to load the update firmware to the third cell via the high speed
interconnect to replace the second errored firmware.

4. The system of claim 1 wherein the errored firmware comprises at least one
member of a group consisting of firmware that is not a desired version of firmware and
corrupt firmware.

20 5. The system of claim 1 further comprising:

a manageability system interconnect;

wherein the first cell is configured to receive an update message via the manageability
system interconnect and, in response thereto, to transmit an acknowledgement
via the manageability system interconnect and to enable the high speed
interconnect; and

25 wherein the second cell further is configured to activate an update menu, to receive an
update command generated via the update menu, and, in response thereto, to
transmit the update message to the first cell and, after receiving the
acknowledgment, to load the update firmware to the first cell via the high
speed interconnect.

6. The system of claim 1 further comprising:

a manageability system interconnect;

wherein the first cell further is configured to receive an update message via the manageability system interconnect and, in response thereto, to enable the high speed interconnect; and

wherein the second cell further is configured to transmit the update message to the first cell and, thereafter, to automatically load the update firmware to the first cell via the high speed interconnect.

7. The system of claim 1 further comprising:

a manageability system interconnect;

wherein the first cell further is configured to receive an update message via the manageability system interconnect and, in response thereto, to transmit an acknowledgement and to enable the high speed interconnect; and

wherein the second cell further is configured to transmit the update message to the first cell and, after receiving the acknowledgment, to automatically load the update firmware to the first cell via the high speed interconnect.

8. A method for loading firmware in a high availability system comprising a high speed interconnect and at least a first cell and a second cell, the first cell coupled to the high speed interconnect and comprising errored firmware such that the high speed interconnect is not enabled for the first cell, the second cell coupled to the high speed interconnect and comprising update firmware, the method comprising:

enabling the high speed interconnect by the first cell; and

loading update firmware from the second cell to the first cell via the high speed interconnect to replace the errored firmware.

9. The method of claim 8 further comprising resetting the second cell and the first cell.

10. The method of claim 8 further comprising:

enabling the high speed interconnect by a third cell comprising second errored firmware; and

loading the update firmware from the second cell to the third cell via the high speed interconnect to replace the second errored firmware.

11. The method of claim 8 further comprising replacing with the update firmware at least one member of a group consisting of firmware that is not a desired version of firmware and corrupt firmware.

12. The method of claim 8 further comprising:

generating an update menu;

receiving an update command generated via the update menu and, in response thereto, transmitting an update message to the first cell via a manageability system interconnect;

receiving the update message at the first cell and, in response thereto, transmitting an acknowledgement via the manageability system interconnect and enabling the high speed interconnect;

receiving the acknowledgment at the second cell; and

loading the update firmware from the second cell to the first cell via the high speed interconnect.

13. The method of claim 8 further comprising:

transmitting an update message to the first cell via a manageability system interconnect;

receiving the update message at the first cell and, in response thereto, enabling the high speed interconnect; and

automatically loading the update firmware from the second cell to the first cell via the high speed interconnect.

14. The method of claim 8 further comprising:

transmitting an update message to the first cell via a manageability system interconnect;

receiving the update message at the first cell and, in response thereto, transmitting an acknowledgement via the manageability system interconnect and enabling the high speed interconnect;

receiving the acknowledgment at the second cell; and

automatically loading the update firmware from the second cell to the first cell via the high speed interconnect.

15. A system for updating firmware in a high availability system comprising:
a high speed interconnect;
a manageability system interconnect;
a mismatched cell coupled to the high speed interconnect and comprising errored
5 firmware, the mismatched cell configured to receive an update message via the
manageability system interconnect and, in response thereto, to enable the high
speed interconnect; and
an update cell coupled to the high speed interconnect and comprising update
10 firmware, the update cell configured to transmit the update message to the
mismatched cell and to automatically load the update firmware to the
mismatched cell via the high speed interconnect.

16. The system of claim 15 further comprising a second mismatched cell
comprising second errored firmware, the second mismatched cell configured to receive a
second update message via the manageability system interconnect and, in response thereto, to
15 enable the high speed interconnect, wherein the update cell further is configured to transmit
the second update message to the second mismatched cell and to automatically load the
update firmware to the second mismatched cell via the high speed interconnect.

17. The system of claim 15 wherein the update cell is configured to automatically
load the update firmware to the mismatched cell only if an auto update flag is set.

20 18. The system of claim 17 wherein the update cell further comprises flash ROM
configured to store the update firmware and NVRAM configured to store a setting of the auto
update flag.

19. The system of claim 15 wherein the update cell further comprises at least one
processor configured to process the update firmware.

25 20. The system of claim 15 wherein the mismatched cell further is configured to
transmit an acknowledgment via the manageability system interconnect after receiving the
update message and the update cell further is configured to transmit the update firmware to
the mismatched cell via the high speed interface after receiving the acknowledgement.